

Date: Fri, 13 May 94 16:01:25 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #522
To: Info-Hams

Info-Hams Digest Fri, 13 May 94 Volume 94 : Issue 522

Today's Topics:

 Amateur Radio and Civil Rights
 A new type of ham radio club / station
 ARLB043 2300 MHz comments sought
 Daily Summary of Solar Geophysical Activity for 12 May
 Looking for 71A (antique tube) data sheet
 nude amateur radio nets
 sacred frequencies
 UHF Wideband HT's -any ideas?
 Will Yaesu MH-18A2B work with HTX-202
 World-Chip (7910) info needed

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 12 May 94 14:23:04
From: ihnp4.ucsd.edu!sdd.hp.com!cs.utexas.edu!howland.reston.ans.net!gatech!
newsxfer.itd.umich.edu!jobone!lynx.unm.edu!dns1.NMSU.Edu!opus!
ataylor@network.ucsd.edu
Subject: Amateur Radio and Civil Rights
To: info-hams@ucsd.edu

<In article <1994May10.085514.2324@hnrc.tufts.edu> jerry@hnrc.tufts.edu (Jerry
Dallal) writes:

<In article <gradyCpJnwy.Buu@netcom.com>, grady@netcom.com (Grady Ward) writes:

<> I already own my assault radios: Icom-735 with 100khz-30Mhz xmit mod

<> and several Icom-W2A's with extended xmit mods for VHF and UHF.

<>

<> And if that weren't enough, I own a Pro2006 with a clipped diode...
<>
<> Too bad these are now illegal radios as of April 26th -- the date
<> of the assault radio ban.

<These are *NOT* illegal radios.

No? Great! I'll just stroll out and buy one...please
tell me where, in the US, I can buy a *new* radio
of the type described above, with the rx/tx tuning
capability described.

<The only thing that's illegal is tuning in to
<some of the frequencies these radios are capable of receiving.

Uh huh...

Date: Wed, 11 May 1994 11:35:08 -0400
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!math.ohio-
state.edu!news.acns.nwu.edu!ftpbox!mothost!lmpsbbs!NewsWatcher!
user@network.ucsd.edu
Subject: A new type of ham radio club / station
To: info-hams@ucsd.edu

Just for fun I thought we should do a side-by-side to the ARRL operation:

In article <znr768510744k@indirect>, nu7i@nowhere (Darrell Shandrow) wrote:
>
> In article <1994May9.174007.28632@rsg1.er.usgs.gov> bodoh@dgg.cr.usgs.gov
> writes:
> >
> > In article <2qg1o5\$j18@Mercury.mcs.com>, svb@MCS.COM (Stephan Bechtolsheim)
> > writes:
> > |> - maximum of around 10 members.

How about 250K- 300K

> > |> - \$50 to \$75 / month membership. With 10 members that
> > |> amounts to a 'club income' of \$6000 - \$9000 a year.

At \$12 per (assume lots of old life members), that's \$3 million minimum

> > |> - Nice and hefty sign up fee of, let's say, \$300.

No penalty from ARRL for first time signup

> > |> - Buy / rent some room somewhere.

Nice facilities in Newington, bought & maintained out of the above dues

> > |> - Every member would have a key to that room.

> > |> - This room would be filled with state-of-the-art
> > |> equipment:
> > |> 1. REAL good and big antennas (theory: if the last
> > |> storm didn't blow them down, they were not high
> > |> enough). Like how about a 120 foot tower.

Why only one tower, W1AW has several. However, if towers blow down, they are no longer useful to support antennas, but the price is not reduced in any proportional fashion.

> > |> 2. Nice low band rig with all the goodies, like
> > |> amplifier, filters, RTTY, AMTOR, ...

>
> Sounds like a bunch of elitists to me. This is not within the spirit of
> amateur radio at all.

It's no worse than many repeater clubs whose members don't participate in HF contests, moonbounce, etc. ARRL does not discriminate between these groups, it encourages activities that benefit amateur radio.

> I'd say that such a club should be frowned upon by the amateur community
> and not given any undeserved respect. 73

I see no reason to frown, just consider it another special interest group spending their own private funds to enjoy their hobby. ARRL members are in the same position, and look at the respect accorded that organization.

>
> Darrell Shandrow at Arizona State University
> Mentor: Internet Direct Mentorship Program!
> Member: National Federation of the Blind
> (The complete information access agenda - You print it you braille it too!)
> --
> Darrell Shandrow at Arizona State University
> Mentor: Internet Direct Mentorship Program!
> Member: National Federation of the Blind
> (The complete information access agenda - You print it you braille it too!)

(No, I'm not a member, but I almost talked me into it!!)

--

Karl Beckman, P.E. < The difference between genius and stupidity >
Motorola Comm - Fixed Data < is that genius has its limits. -Unknown >

The statements and opinions expressed here are not those of Motorola Inc.
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

Date: Thu, 12 May 1994 10:38:53 MDT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!library.ucla.edu!psgrain!nntp.cs.ubc.ca!
alberta!ve6mgs!usenet@network.ucsd.edu
Subject: ARLB043 2300 MHz comments sought
To: info-hams@ucsd.edu

SB QST @ ARL \$ARLB043
ARLB043 2300 MHz comments sought

ZCZC AG08
QST de W1AW
ARRL Bulletin 43 ARLB043
>From ARRL Headquarters
Newington CT May 11, 1994
To all radio amateurs

SB QST ARL ARLB043
ARLB043 2300 MHz comments sought

2300 MHz comments sought

The FCC has issued a Notice of Inquiry on reallocation of spectrum from federal government use (in ET Docket 94-32). 50 MHz of spectrum would be transferred to private sector use, possibly as early as this summer. The comment deadline is June 15, 1994.

The reallocation is called for under the Omnibus Reconciliation Act of 1993, which requires the Department of Commerce to identify 200 MHz of spectrum below 5 GHz to be reallocated within the next 15 years.

The spectrum identified for immediate reallocation is at 2390 to 2400 MHz, 2402 to 2417 MHz, and 4660 to 4685 MHz. Amateurs share the first two ranges. The Commission said that 'there are a number of factors associated with existing allocations of the bands that will affect their potential for private sector use.'

PCA-MAX= +0.1DB @ 2355UT PCA-MIN= -0.5DB @ 2245UT PCA-AVG= +0.0DB
 BOUTF-MAX=55345NT @ 0001UT BOUTF-MIN=55305NT @ 1639UT BOUTF-AVG=55322NT
 GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+077,+000,+000
 GOES6-MAX=P:+129NT@ 1908UT GOES6-MIN=N:-093NT@ 0219UT G6-AVG=+098,+032,-042
 FLUXFCST=STD:090,090,095;SESC:090,090,095 BAI/PAI-FCST=010,025,020/012,025,020
 KFCST=2213 3112 3324 3222 27DAY-AP=016,029 27DAY-KP=4333 3334 3652 3354
 WARNINGS=*GSTRM;*AURMIDWCH
 ALERTS=
 !!END-DATA!!

NOTE: The Effective Sunspot Number for 11 MAY 94 was 17.0.
 The Full Kp Indices for 11 MAY 94 are: 4+ 5- 4o 4o 3o 3+ 3o 4-
 The 3-Hr Ap Indices for 11 MAY 94 are: 31 38 27 27 15 17 15 23
 Greater than 2 MeV Electron Fluence for 12 MAY is: 1.3E+09

SYNOPSIS OF ACTIVITY

 Solar activity was very low, however, numerous activity was reported last period. A total of 16 B-class x-ray events were recorded, most of which were optically uncorrelated. The two largest, a B7 at 12/0409Z and a B9 at 12/0524Z were accompanied by strong discrete and sweep frequency radio bursts. Numerous moderate to strong sweep frequency emissions have been observed this entire period. Two weak to moderate B-class/SF flares were reported from Region 7722 (N07E81). This DHO beta spot group appears to have some delta characteristics, but is still rotating onto the disk. New Region 7723 (N10E30) emerged early this period as a BX0 beta spot group but has grown in the last few hours to a DAO beta.

Solar activity forecast: solar activity is expected to be very low to low. Both Regions 7722 and 7723 exhibits good potential for C-class activity.

The geomagnetic field has been at quiet to active levels for the past 24 hours. The GT 2 MeV electron flux levels have decreased to the high range.

Geophysical activity forecast: the geomagnetic field is expected to be mostly quiet to unsettled on day one of the forecast period. On day's two and three, geomagnetic activity is expected to increase to mostly unsettled to active with some minor storm periods. This is in response to a favorably positioned coronal hole.

Event probabilities 13 may-15 may

Class M 05/10/15
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 13 may-15 may

A. Middle Latitudes

Active 20/30/25
Minor Storm 05/25/20
Major-Severe Storm 01/05/05

B. High Latitudes

Active 25/30/30
Minor Storm 10/30/25
Major-Severe Storm 01/10/05

HF propagation conditions improved over the last 24 hours as levels of geomagnetic activity subsided to quieter levels. High and polar latitude paths have observed improvements to near-normal values, at times. Middle and low latitude paths are observing normal propagation. Propagation is expected to remain near-normal over all regions on 13 May and then may again take a dip toward slightly degraded values (particularly for high and polar latitude paths) as the next disturbance degrades signal qualities. This anticipated disturbance should only last a few days before conditions begin returning back to near-normal levels.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 12/2400Z MAY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7721 S12E42 144 0000 AXX 01 001 ALPHA
7722 N07E65 121 0320 DK0 05 005 BETA
7723 N10E28 158 0030 CA0 04 009 BETA
7714 S14W97 283 PLAGE
7718 N10W51 237 PLAGE
7719 S07W43 229 PLAGE
7720 S10W14 200 PLAGE

REGIONS DUE TO RETURN 13 MAY TO 15 MAY

NMBR LAT LO
7707 N00 078
7705 N03 091

LISTING OF SOLAR ENERGETIC EVENTS FOR 12 MAY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
0405	0409	0411			B7.6		3400	40	
0522	0524	0526			B9.7		460		
0752	0755	0757			B2.4		110		
1450	1453	1455			B2.1		180		

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 12 MAY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
NO EVENTS OBSERVED								

INFERRED CORONAL HOLES. LOCATIONS VALID AT 12/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS

EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
NO DATA AVAILABLE FOR ANALYSIS								

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
11 May:	1738	1752	1802	B3.4						
	1942	1947	1954	B1.0						

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Uncorrelated:	0	0	0	0	0	0	0	0	002	(100.0)

Total Events: 002 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
------	-------	-----	-----	------	----	--------	------	-----------------------------

NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Fri, 13 May 1994 01:43:16 GMT

From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!darwin.sura.net!nih-csl!postman@network.ucsd.edu

Subject: Looking for 71A (antique tube) data sheet

To: info-hams@ucsd.edu

Does anyone have a data sheet for the 71A (or CX371A) vacuum tube? I am looking for much more than just the pinouts. Tube characteristics and curves would be the best. This tube dates back to about 1930.

Thanks.

Andy

Voice: (301) 496-4991

FAX: (301) 496-0630 (will accept high resolution FAX)

--

Andrew Mitz, Biomedical Eng., Nationl Institutes | Opinions are mine alone
of Health Animal Center, Poolesville, MD | arm@helix.nih.gov

Date: Thu, 12 May 94 14:45:28 EDT
From: newshub.sdsu.edu!nic-nac.CSU.net!usc!howland.reston.ans.net!
europa.eng.gtefsd.com!news.msfc.nasa.gov!news.larc.nasa.gov!lerc.nasa.gov!
kira.cc.uakron.edu!malgudi.oar.net@ihnp4.ucsd.edu
Subject: nude amateur radio nets
To: info-hams@ucsd.edu

-----BEGIN PGP SIGNED MESSAGE-----

jfw@ksr.com (John F. Woods) writes:

> kludge@netcom.com (Scott Dorsey) writes:
> >In article <1994May9.145745.26616@emba.uvm.edu> gdavis@griffin.emba.uvm.edu
> <>What is wrong with you geeks? Haven't you ever wished to join the natives
> >>of the Amazon rain forests?
> <>What could be more natural?
> >No way. Sure, it's wet enough for good grounding, but the treeline is
> <too high to put up a decent antenna system. I think I'll stay nude right
> >here, thank you very much.
>
> No, no, you climb one of the trees and put the mast for your vertical up
> toward the top of one of them. The ARRL Antenna Book includes more details.
> You should probably feed with low-loss openwire rather than coax, due to the
> length (see Reflections, by Maxwell). Or, you can use jungle creepers to
> build a hammock up in the canopy somewhere, for the ideal in operating comfor

Nude ham radio creates hazards. One famous safety precautions
when engaging in certain maintenance procedures is to keep one
hand in your pocket....

-----BEGIN PGP SIGNATURE-----

Version: 2.3a

iQCVAgUBldJ5psmzkeX3rfUNAQGvXQP+0IBqLbYtPFw5jwdVIH4/NvQ1EI+DT1jq
fPRM41xnLifhlmHeJuTGj/9HR3NpA8Y3HBRZDJkfCSIIDbBuG7HRmnjFYC1IxMU8
2AyvbrCLYTRTC4K9Tl9XazH/AwwIi9PKGXP56j50rcJPIaDn6wTfe3RVN0vw1Hm
wZx4EatuSpA=
=uwux

-----END PGP SIGNATURE-----

```
/-----\
| Jim Grubs, W8GRT          Voxbox Enterprises    Tel.: 419/885-2814 |
| jgrubs@voxbox.norden1.com 6817 Maplewood Ave.   Fax/Data: 419/885-2905 |
| Fido: 1:234/1.0          Sylvania, Ohio 43560   Home: 419/882-2697 |
|              AMATEUR RADIO - The National Park of the Mind      |
\-----+
```

Date: Thu, 12 May 1994 12:30:59 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!library.ucla.edu!csulb.edu!csus.edu!
netcom.com!rogjd@network.ucsd.edu
Subject: sacred frequencies
To: info-hams@ucsd.edu

Derek Wills (oo7@astro.as.utexas.edu) wrote:
: rogjd@netcom.com (Roger Buffington) says:

: >>Erich Franz Stocker (stocker@spsosun.gsfc.nasa.gov) wrote:

: >>The most absurd statement I have heard is that a "dxe" has the
: >>"right" to complain because someone may use the frequency
: >>that nothing has been heard on for 5min or more. That
: >>certainly isn't real friendly band sharing.

: >You are exactly right. I couldn't agree with you more.

: I disagree, within limits. There are standard DX frequencies
: in the phone bands that are used by DXpeditions and individual
: DX operators, such as 3795, 14195, 21295, 28495. These are
: recognized worldwide as DX gathering places. If you know this,
: and insist on starting a ragchew on 14195, I think it would be
: unnecessarily provocative.

: DX newsletters will often say "Expedition such-and-such will
: operate on the standard DX frequencies", and they are small
: enough in number and well-enough known by most hams that it
: is courteous to avoid those for casual operating when possible.

: Whether this is what the original poster is thinking of, I have
: no idea, but outright condemnation of DXers for wanting to keep
: one frequency per band clear for their sport is not warranted.
: It's a little like claiming that it's OK to park right next to
: a fire hydrant because there hasn't been a local fire for the
: last 5 minutes.

There is room for honest disagreement here, and I disagree with you
thoroughly. Firstly, I've been an amateur since 1966, and I've never

heard of the frequencies you reference in the context you mention. Not once. And I subscribe to CQ and QST. If I didn't know about it, how many of the many many newcomers who are upgrading to general class and above are gonna know it? Darned few, that's how many.

The dx stations have VF0s on their rigs just like the rest of us. They can move a few Khz right or left. If someone else is using the frequency, then that's too bad.

I've had a sked for years with a buddy on 14.0765. At a certain time, I sure wish the rest of you would stay off it. For some reason the rest of hamdom doesn't listen to my pleas and we often have to sidestep. :-)

Sorry, but I think you are wrong on this one.

: Derek "is this frequency in use CQ CQ CQ CQ" Wills (AA5BT, G3NMX)
: Department of Astronomy, University of Texas,
: Austin TX 78712. (512-471-1392)
: oo7@astro.as.utexas.edu

--

rogjd@netcom.com
Glendale, CA
AB6WR

Date: Wed, 11 May 1994 10:45:39 -0400
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!news.acns.nwu.edu!ftpbox!mothost!lmpsbbs!NewsWatcher!
user@network.ucsd.edu
Subject: UHF Wideband HT's -any ideas?
To: info-hams@ucsd.edu

In article <2qmb7m\$cnj@agate.berkeley.edu>,
kennish@kabuki.EECS.Berkeley.EDU (Ken A. Nishimura) wrote:

> In article <2qm6pl\$9j7@sbctri.sbc.com>,
> Kenneth M. Gianino <gianino@sbctri.sbc.com> wrote:
> >Is there a good, UHF only HT out there that can be modified to transmit and
> >receive up to 470MHz? I don't mind retuning and losing the part or all of the
> >70cm band. I've checked the mods servers and there seems to be very little
> >interest in the UHF siblings of the current crop of 2m HT's. I'm not
> >interested in dual band units. Anyone out there experienced with the Yaesu
> >FT-73? I need an easily tunable unit for testing UHF GMRS repeaters and I am
> >aware of the type acceptance problems if used on the air. I'm also aware of
> >the type accepted units on the market that are very expensive and awkward to

> >program. Any information would be appreciated. Thanks in advance.
> >-Ken WBOQNA gianino@sbctri.sbc.com

Ken, have you considered that, since there are only 8 GMRS repeater channels, anybody's (type-accepted for Part 95) 8 channel radio covers your repeater testing needs as well as those pesky legal requirements of the ever-meddling FCC? Once programmed, your test unit will be useful for a very long time. If you also want talk-around and simplex on the 5W ERP offsets, the maximum channel count required is 23 frequencies.

If you are doing testing into a dummy load and you run the illegally modified and operated portable directly into the receiver through a decent RF attenuator, you won't have any external radiation to worry about. You also could use a simple RF signal generator and a frequency counter if the sig-gen is too simple and therefore unstable. Either way, your amateur and GMRS licenses will then not be in jeopardy.

Of course, being a law (and FCC Rules) abiding amateur, you DO also hold a valid GMRS license or letter of authorization from the licensee for each and every one of those GMRS repeaters you access on the air, right?? I know that your employer (and mine) takes a VERY dim view of any FCC rules violations, particularly if they could be business-related.

>
> I don't know about the FT-73, but the Yaesu FT-41 with the appropriate
> mods will transmit up to 470 Mhz. The mod itself is for MARS/CAP and
> specified a 420-460 MHz range, but I have tested the unit to 470 MHz on
> the analyzer here at work, and it seems to work. Variations in the VCO
> from unit to unit may make it somewhat flaky out at 470 MHz. Very
> small unit, low voltage amplifier. Not a lot of RF output with the
> standard battery pack.

It is interesting that Yaesu would publically distribute a "MARS/CAP" mod in the USA when they are fully aware that neither of those services are authorized to operate anywhere in the 420 MHz to 460 MHz frequency range. The official range for the military and Feds is 406-420 MHz, 420-450 MHz is us amateurs (except up here near the Canadian border), while the 450-460 range is under FCC jurisdiction and is used for land mobile Parts 20, 90, and 95 amongst others.

>
> Of course, I don't guarantee that your unit (if you choose to buy one
> and mod it) will work to 470 MHz. Your mileage may vary. Oh, and you'll
> have to get the mods from someone other than me -- I hate to be this
> way, but since you have freely admitted that you would be doing something
> illegal, I won't help you -- call me tighta**ed, but blame the trial
> lawyers.

>
> Yes, type accepted units are hard to program. That is a requirement
> of type acceptance -- make it hard for the user to go somewhere he/she
> isn't supposed to go.
>
> -Ken

It also ensures at least a minimum standard of equipment technical performance which amateur operators are not required (and most are not equipped) to maintain. This is a necessary condition in any channelized radio service. Let's try not to give the Amateur Radio Service another black eye by defying the FCC Rules!

--
Karl Beckman, P.E. < The difference between genius and stupidity >
Motorola Comm - Fixed Data < is that genius has its limits. -Unknown >

The statements and opinions expressed here are not those of Motorola Inc.
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

Date: Thu, 12 May 1994 12:53:11 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!gatech!
newsxfer.itd.umich.edu!jobone!ukma!rsg1.er.usgs.gov!junger@network.ucsd.edu
Subject: Will Yaesu MH-18A2B work with HTX-202
To: info-hams@ucsd.edu

In article <tblake.49.2DCFAAAB@stpaul.ncr.com>, <tblake@stpaul.ncr.com> wrote:
>Hi Gang,
>
>I was debating whether or not to buy a speaker-microphone
>for my RS HTX-202. A co-worker has a Yeasu MH-18A2B
>speaker-microphone he does not want. Will the Yaesu
>speaker-mic work with my HTX-202?
>
>

I bought RS's speaker-mike that they recommend for the HTX-202. It seems to work fine, and I have had good audio reports using it. As a more specific reply to your question, the RS speaker-mike package/instructions has written on it in large letters: "Yaesu and Icom compatible", whatever that means. But remember that YMMV, etc. etc.

73's - John, W3G0I

Date: Thu, 12 May 1994 01:36:26 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!
swrinde!emory!rsiatl!ke4zv!gary@network.ucsd.edu
Subject: World-Chip (7910) info needed
To: info-hams@ucsd.edu

In article <01HC7LWENXPU8WXHRE@pitvax.xx.rmit.edu.au> DAVID@pitvax.xx.rmit.EDU.AU
(David Taylor RMIT Bundoora) writes:

>
>I'm trying to assemble equipment to get started on this mode. I've come
>across an old modem that has a 'AM7910DC WORLD-CHIP' in it. I've heard
>that some TNC's use the 7910 chip, so am wondering if this is the same?

Yes.

>I will need circuit and pin strapping info for it as well - the original
>modem offered 1200/75 operation only. Looking in the packet directories
>of several ham archives (uscd, funet, buffalo) has yielded nothing on basic
>1200b modems. I heard of a modem cct. in the 1992 ARRL handbook, does this
>use a 7910?

Yes.

>While I'm asking questions... can anyone tell me if 1200b packet (Bell 202)
>uses straight FSK and what the audio frequencies are? I can't find this
>info anywhere :-(

Typically, Bell 202 is used via AFSK over FM voice radios. Bell 103 is
used at HF, either FSK or AFSK over a SSB radio (that amounts to the
same thing with a good SSB rig). The Bell 202 tone frequencies are
1200 and 2200 Hz. Bell 103 has two sets of tones depending on whether
it's in originate or answer mode. They are 1070 and 1270 for originate
mode and 2025 and 2225 for answer mode. Typical HF operation is in
originate loopback mode.

AM7910 pinouts are as follows:

Pin	Signal
1	!Ring (tie high)
2	Vcc (+5 volts)
3	Reset (tie between a .033 uf cap to ground and a 1 meg resistor tied to 5 volts)
4	Vbb (-5 volts)
5	RC (this is receive carrier, feed receiver audio to it through a a 0.68 uf cap and bridge a 10 k resistor from the pin to ground.)
6-7	Join these two pins with a 2000 pf cap and 100 ohm resistor in series
8	TC (this is transmit carrier, feed to microphone input via 0.68 uf)

>>In article <1994May9.145745.26616@emba.uvm.edu> gdavis@griffin.emba.uvm.edu
(Gary Davis) writes:

><>What is wrong with you geeks? Haven't you ever wished to join the natives
>>>of the Amazon rain forests?

><>What could be more natural?

>>No way. Sure, it's wet enough for good grounding, but the treeline is
><too high to put up a decent antenna system. I think I'll stay nude right
>>here, thank you very much.

>

>No, no, you climb one of the trees and put the mast for your vertical up
>toward the top of one of them. The ARRL Antenna Book includes more details.
>You should probably feed with low-loss openwire rather than coax, due to the
>length (see Reflections, by Maxwell). Or, you can use jungle creepers to
>build a hammock up in the canopy somewhere, for the ideal in operating comfort.

Been there, done that. Verticals don't seem to work well in such a situation.
Most of your signal is striking the wet trees around you. The only decent
system I managed to get set up was a dipole stretched across a burned
clearing.

--scott

(who still has a PRC-8 somewhere in the garage and will be using
it on Field Day)

--

"C'est un Nagra. C'est suisse, et tres, tres precis."

End of Info-Hams Digest V94 #522
